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PROC. ENTOMOL. SOC. WASH.  
86(4), 1984, p. 789

## NOTE

### A New Synonym in *Hexagenia* (Ephemeroptera: Ephemeridae)

The common burrowing mayfly, *Hexagenia limbata* (Serville), has recently been shown in field and laboratory experiments by McCafferty and Pereira (1984. Ann. Entomol. Soc. Am. 77: 69–87) to be highly variable, with the source of much of this variability being attributable to temperatures of the developmental environment. That study also showed that the range of variability included all of the color pattern characteristics previously associated with *Hexagenia munda* Eaton, with particular reference to the abdomen but also including the lack of costal crossvein margination and the color of the costal membrane, both of which were used by Spieth (1941. Amer. Midl. Nat. 26: 239) to key *H. munda* from *H. limbata*. The shape of the penes has also been proposed as a distinguishing specific character. After many years of identifying *Hexagenia* from throughout North America (*H. limbata* and *H. munda* are reportedly sympatric over most of eastern N.A., McCafferty, 1975. Trans. Am. Entomol. Soc. 101: 470), I have found these possible penes differences indiscernible. B. C. Kondratieff (pers. comm., 1983) has also not been able to discern supposed penes differences and has seriously doubted the validity of *H. munda*. Differences in curvature of the penes drawn by Spieth (1941: 278) are miniscule and can be duplicated in many *limbata* specimens by a slight rotation, or by the angle of view in a slide mount. Even if such differences occur, they would appear to represent only slight intraspecific variability, particularly in light of the extreme range of variability of other characters of *H. limbata*.

Underlying abdominal color pattern of the adults that has been used to attempt to distinguish larvae of *H. munda* expresses only a known variation of *H. limbata*. I have also determined that tusk length varies considerably in *H. limbata* larvae and includes size differences previously suspected of being specific for some *H. munda*.

On the basis of the above I designate *H. munda* Eaton as a NEW JUNIOR SYNONYM of *H. limbata* (Serville). Fourteen specific epithets are now referable to *H. limbata*, including seven that have been synonymized with *H. munda*.

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